

CRF Errors Corrected by the STIC Systems Branch

OIPB

Serial Number: 10/006,591

CRF Processing Date: 5/1/02 0590
 Edited by: DC
 Verified by: DC (STIC staff) 0425

#6

ENTERED

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☒ Deleted: ☒ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted **ending** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☐ Other: _____

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95



OIPE

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/10/006,591

DATE: 05/01/2002
 TIME: 11:34:35

Input Set : A:\PTO.DC.txt
 Output Set: N:\CRF3\05012002\J006591.raw

5 <110> APPLICANT: Bowdish, Katherine S.
 7 Frederickson, Shana
 9 Lin, Ying-Chi
 11 Renshaw, Mark
 13 Wild, Martha
 15 McWhirter, John
 19 <120> TITLE OF INVENTION: ENGINEERED PLASMIDS AND THEIR USE FOR IN SITU PRODUCTION OF
 GENES
 23 <130> FILE REFERENCE: 1087-3
 27 <140> CURRENT APPLICATION NUMBER: 10/006,591
 29 <141> CURRENT FILING DATE: 2001-12-05
 33 <150> PRIOR APPLICATION NUMBER: 60/251,440
 35 <151> PRIOR FILING DATE: 2000-12-05
 39 <160> NUMBER OF SEQ ID NOS: 14
 43 <170> SOFTWARE: PatentIn version 3.1
 47 <210> SEQ ID NO: 1
 49 <211> LENGTH: 6122
 51 <212> TYPE: DNA
 53 <213> ORGANISM: Artificial Sequence
 57 <220> FEATURE:
 59 <223> OTHER INFORMATION: Description of Artificial Sequence: vector
 61 <400> SEQUENCE: 1
 62 gggaaattgt aagcgttaat attttgtaa aattgcggtt aaatttttgt taaatcagct 60
 64 catttttttaa ccaataggcc gaaatcggca aaatccctta taaatcaaaa gaatagaccg 120
 66 agataggggtt gagtgttggt ccagtttgga acaagagtcc actattaaag aacgtggact 180
 68 ccaacgtcaa agggcgaaaa accgtctatc agggcgatgg ccactacgt gaaccatcac 240
 70 cctaatacaag ttttttgggg tcgaggtgcc gtaaagcact aaatcggaac cctaaaggga 300
 72 gcccccgatt tagagcttga cggggaaagc cggcgaaagt ggcgagaaag gaagggaaga 360
 74 aagcgaaaag agcgggcgct agggcgctg caagtgtagc ggtcacgctg cgcgtaacca 420
 76 ccacaccgcg cgcgcttaat gcgccgtac agggcgcgct aggtggcact ttctggggaa 480
 78 atgtgcgcgg aacccctatt tgtttatttt tctaaataca ttcaaataat tatccgctca 540
 80 tgagacaata accctgataa atgcttcaat aatattgaaa aaggaagagt atgagtattc 600
 82 aacattttccg tgtgcgccctt attccctttt ttgcggcatt ttgccttcct gtttttgcct 660
 84 acccagaaac gctggtgaaa gtaaaagatg ctgaagatca gttgggtgca cgagtgggtt 720
 86 accatgaact ggatctcaac agcggtaaga tccttgagag ttttcgcccc gaagaacgtt 780
 88 ttccaatgat gagcactttt cgaccgaata aatacctgtg acggaagatc acttcgcaga 840
 90 ataaataaat cctggtgtcc ctgttgatac cgggaagccc tgggccaaact tttggcgaaa 900
 92 atgagacgtt gatcggcacg taagaggttc caactttcac cataatgaaa taagatcact 960
 94 accgggcgta ttttttgagt tgtcgagatt ttcaggagct aaggaagcta aaatggagaa 1020
 96 aaaaatcact ggatatacca ccgttgatat atcccaatgg catcgtaaag aacattttga 1080
 98 ggcatttcag tcagttgctc aatgtacctt taaccagacc gttcagctgg atattacggc 1140
 100 ctttttaaaag accgtaaaga aaaataagca caagttttat ccggccttta ttcacattct 1200
 102 tgccccgctg atgaatgctc atccggaatt acgtatggca atgaaagacg gtgagctgg 1260
 104 gatatgggat agtgttcacc cttgttacac cgttttccat gagcaaaactg aaacgttttc 1320

RAW SEQUENCE LISTING

DATE: 05/01/2002

PATENT APPLICATION: US/10/006,591

TIME: 11:34:35

Input Set : A:\PTO.DC.txt

Output Set: N:\CRF3\05012002\J006591.raw

106	atcgctctgg	agtgaatacc	acgacgattt	ccggcagttt	ctacacatat	attcgcaaga	1380
108	tgtggcgtgt	tacgggtgaaa	acctggccta	tttccctaaa	gggtttattg	agaatatgtt	1440
110	tttcgtctca	gccaatccct	gggtgagttt	caccagtttt	gatttaaacg	tggccaatat	1500
112	ggacaacttc	ttcgcccccg	ttttcaccat	gggcaaata	tatacgcaag	gcgacaaggt	1560
114	gctgatgccg	ctggcgattc	aggttcatca	tgccgtttgt	gatggcttcc	atgtcggcag	1620
116	aatgcttaat	gaattacaac	agtactgcga	tgagtggcag	ggcggggcgt	aattttttta	1680
118	aggcagttat	tgggtgccctt	aaacgcctgg	ttgctacgcc	tgaataagtg	ataataagcg	1740
120	gatgaatggc	agaaattcga	aagcaaattc	gacccggtcg	tcggttcagg	gcagggtcgt	1800
122	taaatagccg	cttatgtcta	ttgctggttt	accggtttat	tgactaccgg	aagcagtggt	1860
124	accgtgtgct	tctcaaatgc	ctgaggccag	tttgtctcagg	ctctccccgt	ggaggttaata	1920
126	attgacgata	tgatcctttt	tttctgatca	aaaaggatct	agggtgaagat	cctttttgat	1980
128	aatctcatga	ccaaaatccc	ttaacgtgag	ttttcgttcc	actgagcgtc	agaccccgta	2040
130	gaaaagatca	aaggatcttc	ttgagatcct	ttttttctgc	gcgtaatctg	ctgcttgcaa	2100
132	acaaaaaaac	cacgcgtacc	agcggtggtt	tgtttgccgg	atcaagagct	accaactcct	2160
134	tttccgaagg	taactggcct	cagcagagcg	cagataccaa	atactgtcct	tctagtgtag	2220
136	ccgtagttag	gccaccactt	caagaactct	gtagcaccgc	ctacatacct	cgctctgcta	2280
138	atcctgttac	cagtggctgc	tgccagtggc	gataagtcgt	gtcttaccgg	gttgactca	2340
140	agacgatagt	taccggataa	ggcgcagcgg	tcgggctgaa	cgggggggtt	gtgcacacag	2400
142	cccagcttgg	agcgaacgac	ctacaccgaa	ctgagatacc	tacagcgtga	gctatgagaa	2460
144	agcggcacgc	ttcccgagg	gagaaaggcg	gacaggtatc	cggtaagcgg	cagggtcgga	2520
146	acaggagagc	gcacgagggg	gcttccaggg	ggaaacgcct	ggtatcttta	tagtcctgtc	2580
148	gggtttcggc	acctctgact	tgagcgtcga	tttttgtgat	gctcgtcagg	ggggcggagc	2640
150	ctatgaaaaa	acgccagcaa	cgcggccctt	ttacggttcc	tggccttttg	ctggcctttt	2700
152	gctcacatgt	tctttcctgc	gttatccctt	gattctgtgg	ataaccgtat	taccgccttt	2760
154	gagtgaactg	ataccgctcg	ccgcagccga	acgaccgagc	gcagcagagc	agtgaagcag	2820
156	gaagcggaag	agcgcccaat	acgcaaaccg	cctctccccg	cgcgttgggc	gattcattaa	2880
158	tgcagctggc	acgacaggtt	tcccgaactg	aaagcgggca	gtgagcgcaa	cgcaattaat	2940
160	gtgagttagc	tcactcatta	ggcaccccg	gctttacact	ttatgcttcc	ggctcgtatg	3000
162	ttgtgtggaa	ttgtgagcgg	ataacaattg	aattcaggag	gaatttaaaa	tgaaaaagac	3060
164	agctatcgcg	attgcagtgg	cactggctgg	tttcgctacc	gtggcccagg	cggccgagct	3120
166	cgactgcact	ggatgggtgg	gctggatggt	aagccgctgg	caagcgggtg	agtgcctctg	3180
168	gatgtcgctc	cacaaggtaa	acagttgatt	gaactgcctg	aactaccgca	gccggagagc	3240
170	gccgggcaac	tctggctcac	agtacgcgta	gtgcaaccga	acgcgaccgc	atggtcagaa	3300
172	gccgggcaca	tcagcgcctg	gcagcagtgg	cgtctggcgg	aaaacctcag	tgtgacgctc	3360
174	cccgcccgct	cccacgccat	cccgcatctg	accaccagcg	aatggatttt	ttgcatcgag	3420
176	ctgggtaata	agcgttgcca	atttaaccgc	cagtcagggt	ttcttttcaca	gatgtggatt	3480
178	ggcgataaaa	aacaactgct	gacgccgctg	cgcgatcagt	tcacccgtgc	accgctggat	3540
180	aacgacattg	gcgtaagtga	agcgacccgc	attgacccta	acgcctgggt	cgaacgctgg	3600
182	aaggcgcgcg	gccattacca	ggccgaagca	gcgttggtgc	agtgcacggc	agatacactt	3660
184	gctgatgcgg	tgtgattac	gaccgctcac	gcgtggcagc	atcaggggaa	aaccttattt	3720
186	atcagccgga	aaacctaccg	gattgatggt	agtggtcaaa	tggcgattac	cgttgatggt	3780
188	gaagtggcga	gcgatacacc	gcatccggcg	cggattggcc	tgaactgcca	gctggcgagc	3840
190	gtagcagagc	gggtaaaactg	gctcggatta	gggcccgaag	aaaactatcc	cgaccgcctt	3900
192	actgccgcct	gttttgaccg	ctgggatctg	ccattgtcag	acatgtatac	tggctgcacc	3960
194	atctgtcttc	atcttccgcg	catctgatga	gcagttgaaa	tctggaactg	cctctgttgt	4020
196	gtgcctgctg	aataactttt	atcccagaga	ggccaaagta	cagtggaaag	tggataacgc	4080
198	cctccaatcg	ggtaactccc	aggagagtgt	cacagagcag	gacagcaagg	acagcaccta	4140
200	cagcctcagc	agcaccctga	cgctgagcaa	agcagactac	gagaaacaca	aagtatatgc	4200
202	ctgcgaagtc	accatcaggg	gcctgagctt	gcccgtcaca	aagagcttca	acaggggaga	4260

RAW SEQUENCE LISTING

DATE: 05/01/2002

PATENT APPLICATION: US/10/006,591

TIME: 11:34:35

Input Set : A:\PTO.DC.txt

Output Set: N:\CRF3\05012002\J006591.raw

```

204 gtgttagttc tagataatta attaggagga atttaaaatg aaatacctat tgcctacggc 4320
206 agccgctgga ttgttattac tcgctgcca accagccatg gccctcgagc tgatgagcca 4380
208 tggaagctgt gtcgcctgca ccaggctccc acggctcgtg gtgcggtgcg cttctggtgt 4440
210 tcgctgccta cagccgacac gtcgagcttc gtgcccctag agttgcgcgt cacagcagcc 4500
212 tccggcgctc cgcgatatca ccgtgtcatc cacatcaatg aagtagtgct cctagacgcc 4560
214 cccgtggggc tgggtggcgcg gttggctgac gagagcggcc acgtagtgtt gcgctggctc 4620
216 ccgcccctg agacacccat gacgtctcac atccgctacg aggtggacgt ctccggccggc 4680
218 aacggcgagc ggagcgtaca gagggtggag atcctggagg gccgcaccga gtgtgtgctg 4740
220 agcaacctgc ggggcccggc gcgctacacc ttcgcgctcc gcgcgcgtat ggctgagccg 4800
222 agcttcggcg gcttctggag cgccctggtc gagcctgtgt cgtgctgac gcctagcgac 4860
224 ctggaccccc tcactctgac gctctccctc atcctcgtgg tcactctggt gctgctgacc 4920
226 gtgctcgcgc tgcctctcca ccgcccggct ctgaagcaga agatctggcc tggcatcccg 4980
228 agcccagaga gcgagtttga aggcctcttc accaccacac aggttaactt ccagctgtgg 5040
230 ctgtaccaga atgatggctg cctgtggtgg agcccctgca ccccttcac ggaggaccca 5100
232 cctgcttccc tggaagtccc ctccagagcg tgcctgggga cgatgcagc agtgaggccg 5160
234 gggacagatg atgagggccc atcggctctc cccctggcac cctcctccaa gagcacctct 5220
236 gggggcacag cggccctggg ctgcctggtc aaggactact tccccgaacc ggtgacggtg 5280
238 tcgtggaact caggcgccct gaccagcgcc gtgcacacct tcccggctgt cctacagtcc 5340
240 tcaggactct actccctcag cagcgtggtg accgtgccct ccagcagctt gggcaccag 5400
242 acctacatct gcaacgtgaa tcacaagccc agcaacacca aggtggacaa gaaagttgag 5460
244 cccaaatctt gtgacaaaac tagtgccag gccggccagc accatcacca tcacatggc 5520
246 gcataccggt acgacgttcc ggactacgct tcttaggagg gtggtggctc tgaggggtggc 5580
248 ggttctgagg gtggcggtc tgagggaggc ggttccgggt gtggctctgg ttccggtgat 5640
250 tttgattatg aaaagatggc aaacgcta atagggggcta tgaccgaaa tgccgatgaa 5700
252 aacgcgtac agtctgacgc taaaggcaaa cttgattctg tcgctactga ttacggtgct 5760
254 gctatcgatg gtttcatagg tgacgtttcc ggccttgcta atggtaatgg tgctactggt 5820
256 gattttgctg gctctaattc ccaaatggct caagtgggtg acggtgataa ttcaccttta 5880
258 atgaataatt tccgtcaata ttaccttcc ctcctcaat cggttgaaat tcgccctttt 5940
260 gtccttagcg ctggtaaacc atatgaattt tctattgatt gtgacaaaat aaacttattc 6000
262 cgtggtgtct ttgcgtttct tttatatgtt gccaccttta tgtatgtatt ttctacgttt 6060
264 gctaacatac tgcgtaataa ggagtcctaa gctagcta atatttaagc ggccgcagat 6120
266 ct 6122
269 <210> SEQ ID NO: 2
271 <211> LENGTH: 6122
273 <212> TYPE: DNA
275 <213> ORGANISM: Artificial Sequence
279 <220> FEATURE:
281 <223> OTHER INFORMATION: Description of Artificial Sequence: vector
283 <400> SEQUENCE: 2
284 ccccttaaca ttgcgaatta taaaacaatt ttaagcgcaa tttaaaaaca atttagtcga 60
286 gtaaaaaatt ggttatccgg ctttagccgt tttagggaa atttagtttt cttatctggc 120
288 tctatcccaa ctcaacaaca ggtcaaacct tgttctcagg tgataatttc ttgcacctga 180
290 ggttgagttt tcccgctttt tggcagatag tcccgctacc ggggtgatgca cttggtagtg 240
292 ggattagttc aaaaaacccc agctccacgg catttcgtga tttagccttg ggatttccct 300
294 cgggggctaa atctcgaact gcccttttcg gccgcttgca ccgctctttc cttcccttct 360
296 ttcgctttcc tcgcccgcga tcccgcgacc gttcacatcg ccagtgcgac gcgcattggt 420
298 ggtgtgggcg gcgcgaatta cgcggcgatg tcccgcgag tccaccgtga aaagcccctt 480
300 tacacgcgcc ttggggataa acaataaaaa agatttatgt aagtttatac ataggcgagt 540
302 actctgttat tgggactatt tacgaagtta ttataacttt ttccttctca tactcataag 600

```

RAW SEQUENCE LISTING

DATE: 05/01/2002

PATENT APPLICATION: US/10/006,591

TIME: 11:34:35

Input Set : A:\PTO.DC.txt

Output Set: N:\CRF3\05012002\J006591.raw

304	ttgtaaaggc	acagcgggaa	taagggaaaa	aacgcggtaa	aacggaagga	caaaaacgag	660
306	tgggtctttg	cgaccacttt	cattttctac	gacttctagt	caaccacagt	gctcacccaa	720
308	tgtagcttga	cctagagttg	tcgccattct	aggaactctc	aaaagcgggg	cttcttgcaa	780
310	aagggtacta	ctcgtgaaaa	gctggcttat	ttatggacac	tgccttctag	tgaagcgtct	840
312	tattttattt	ggaccacagg	gacaactatg	gcccttcggg	acccggttga	aaaccgcttt	900
314	tactctgcaa	ctagccgtgc	attctccaag	gttgaaagtg	gtattacttt	attctagtga	960
316	tggcccgcat	aaaaaactca	acagctctaa	aagtctctga	ttccttcgat	tttacctctt	1020
318	tttttagtga	cctatatggg	ggcaactata	taggggtacc	gtagcatttc	ttgtaaaact	1080
320	ccgtaaagtc	agtcaacgag	ttacatggat	attgggtctg	caagtcgacc	tataatgccg	1140
322	gaaaaatttc	tggcatttct	ttttattcgt	gttcaaaaata	ggccggaaat	aagtgtgaaga	1200
324	acgggcgga	tacttacgag	taggccttaa	tgcataccgt	tactttctgc	cactcgacca	1260
326	ctatacccta	tcacaagtgg	gaacaatgtg	gcaaaaggta	ctcgtttgac	tttgcaaaag	1320
328	tagcgagacc	tacttatagg	tgtgtctaaa	ggccgtcaaa	gatgtgtata	taagcgttct	1380
330	acaccgcaca	atgccacttt	tggaccggat	aaagggattt	cccaaataac	tcttatacaa	1440
332	aaagcagagt	cgttagggga	ccactcaaaa	gtgggtcaaaa	ctaaatttgc	acgggttata	1500
334	cctgttgaag	aagcgggggc	aaaagtggta	cccggttata	atatgcgttc	cgctgttcca	1560
336	cgactacggc	gaccgctaag	tccaagtagt	acggcaaaaa	ctaccgaagg	tacagccgtc	1620
338	ttacgaatta	cttaatgttg	tcatgacgct	actcacccgtc	ccgccccgca	ttaaaaaaat	1680
340	tccgtcaata	accacgggaa	tttgccgacc	aacgatgcgg	acttattcac	tattattcgc	1740
342	ctacttaccg	tctttaagct	ttcgtttaag	ctggggccagc	agccaagtcc	cgtcccagca	1800
344	atttatcggc	gaatacagat	aacgacaaaa	tggccaaaata	actgatggcc	ttcgtcacac	1860
346	tggcacacga	agagtttacg	gactccggtc	aaacgagtc	gagaggggca	cctccattat	1920
348	taactgctat	actaggaaaa	aaagactagt	ttttcctaga	tccacttcta	ggaaaaacta	1980
350	ttagagtact	ggtttttagg	aattgcactc	aaaagcaagg	tgactcgcag	tctggggcat	2040
352	cttttctagt	ttcctagaag	aactctagga	aaaaaagacg	cgcattagac	gacgaacgtt	2100
354	tgtttttttg	gtggcgatgg	tcgccaccaa	acaaacggcc	tagttctcga	tggttgagaa	2160
356	aaaggttcc	attgaccgaa	gtcgtctcgc	gtctatgggt	tatgacagga	agatcacatc	2220
358	ggcatcaatc	cgtgtgtgaa	gttcttgaga	catcgtggcg	gatgtatgga	gcgagacgat	2280
360	taggacaatg	gtcccgacg	acggtcacgc	ctattcagca	cagaatggcc	caacctgagt	2340
362	tctgctatca	atggcctatt	ccgcttcgcc	agcccgactt	gccccccaag	cacgtgtgtc	2400
364	gggtcgaacc	tcgcttgctg	gatgtggctt	gactctatgg	atgtcgcact	cgatactctt	2460
366	tcgcggtgcg	aagggttcc	ctctttccgc	ctgtccatag	gccattcgcc	gtcccagcct	2520
368	tgtcctctcg	cgtgtccct	cgaaggccc	cctttgcgga	ccatagaaat	atcaggacag	2580
370	cccaaagcgg	tggagactga	actcgcagct	aaaaacacta	cgagcagtcc	ccccgcctcg	2640
372	gatacctttt	tgcggtcggt	gcgcgggaaa	aatgccaagg	accggaac	gaccggaaaa	2700
374	cgagtgtaca	agaaaggacg	caatagggga	ctaagacacc	tattggcata	atggcggaaa	2760
376	ctcactcgac	tatggcgagc	ggcgtcggt	tgtgtgctcg	cgtcgtcag	tcactcgctc	2820
378	cttcgccttc	tcgcggttta	tgcgtttggc	ggagaggggc	gcgcaaccgg	ctaagtaatt	2880
380	acgtcgaccg	tgtgttccaa	agggctgacc	tttcgcccgt	cactcgctt	gcgttaatta	2940
382	cactcaatcg	agtgaagta	ccgtgggtgc	cgaaatgtga	aatacgaagg	ccgagcatac	3000
384	aacacacctt	aacactcgcc	tattgttaac	ttaagtcctc	cttaaatttt	actttttctg	3060
386	tcgatagcgc	taacgtcacc	gtgaccgacc	aaagcgatgg	caccgggtcc	gcccgtcga	3120
388	gctgacgtga	cctaccaccg	cgacctacca	ttcggcgacc	gttcgccact	tcacggagac	3180
390	ctacagcgag	gtgttccatt	tgtcaactaa	cttgacggac	ttgatggcgt	cggcctctcg	3240
392	cggcccgttg	agaccgagtg	tcatgcgcac	cacggttggt	tgcgtggcg	taccagtctt	3300
394	cggcccgtgt	agtcgaggac	cgtcgtcacc	gcagaccgcc	ttttggagtc	acactgcgag	3360
396	ggcgcgcgca	gggtgcggta	ggcgtagac	tgggtgctgc	tttacctaaa	aacgtagctc	3420
398	gaccatttat	tcgcaaccgt	taaattggcg	gtcagtcga	aagaaagtgt	ctacacctaa	3480
400	ccgctatttt	ttgttgacga	ctgcggcgac	gcgctagtca	agtgggcacg	tggcgacctc	3540

RAW SEQUENCE LISTING

DATE: 05/01/2002

PATENT APPLICATION: US/10/006,591

TIME: 11:34:35

Input Set : A:\PTO.DC.txt

Output Set: N:\CRF3\05012002\J006591.raw

```

402 ttgctgtaac cgcattcact tcgctgggcy taactgggat tgcggaccca gcttgcgacc 3600
404 ttccgcccgc cggtaatggt ccggcttcgt cgcaacaacg tcacgtgccg tctatgtgaa 3660
406 cgactacgcc acgactaatg ctggcgagtg cgcaccgtcg tagtccccctt ttggaataaa 3720
408 tagtcggcct tttggatggc ctaactacca tcaccagttt accgctaata gcaactacaa 3780
410 cttcaccgct cgtatgttg ctagggccgc gcctaaccgg acttgacggt cgaccgcgtc 3840
412 catcgtctcg cccatttgac cgagcctaata cccggcgttc ttttgatagg gctggcggaa 3900
414 tgacggcggg caaaactggc gaccctagac ggtaacagtc tgtacatatg accgacgtgg 3960
416 tagacagaag tagaagggcg gtagactact cgtcaacttt agaccttgac ggagacaaca 4020
418 cacggacgac ttattgaaga tagggtctct ccggtttcat gtcaccttcc acctattgcy 4080
420 ggaggttagc ccattgaggg tcctctcaca gtgtctcgtc ctgtcgttcc tgtcgtggat 4140
422 gtcggagtcg tcgtgggact gcgactcggt tcgtctgatg ctctttgtgt ttcataatag 4200
424 gacgcttcag tgggtagtcc cggactcgaa cgggcagtggt ttctcgaagt tgtccccctc 4260
426 cacaatcaag atctattaat taatctcctc taaattttac tttatggata acggatgccg 4320
428 tcggcgacct aacaataatg agcgacgggt tggtcggtac cgggagctcg actactcggt 4380
430 accttcgaca cagcggacgt ggtccgaggg tgcccgagcac cagccacgcg gaagaccaca 4440
432 agcgacggat gtcggtgtg cagctcgaag cagggggatc tcaacgcgca gtgtcgtcgg 4500
434 aggccgcgag gcgctatagt ggcacagtag gtgtagttag ttcatacaga ggatctgcgg 4560
436 gggcaccgcc accaccgcgc caaccgactg ctctcgccgg tgcatacaca cgcgaccgag 4620
438 ggcggcggac tctgtgggta ctgcagagtg taggcgatgc tccacctgca gagccggccg 4680
440 ttgccgcgtc cctcgcatgt ctcccacctc taggacctcc cggcggtggc caccacgac 4740
442 tcgttggaag ccccgccctg cgcgatgtgg aagcggcagg cgcgcgcata ccgactcggc 4800
444 tcgaagccgc cgaagacctc gcggaccagc ctccgacaca gcgacgactg cggatcgcgtg 4860
446 gacctggggg agtaggactg cgagagggag taggagcacc agtaggacca cgacgactgg 4920
448 cagagcgcg acgagagggg ggccggccga gacttcgtct tctagaccgg accgtagggc 4980
450 tcgggtctct cgtcaaaact tccggagaag tgggtgggtgt tcccattgaa ggtcgacacc 5040
452 gacatggtct tactaccgac ggacaccacc tcggggacgt gggggaagtg cctcctgggt 5100
454 ggacgaaggg accttcagga gactctcgcg acgacccctc gctacgtccg tcacctcggc 5160
456 cctgtctac tactcccggg tagccagaag ggggacgtg ggaggaggtt ctcgtaggag 5220
458 ccccggtgtc gccgggaccc gacggaccag ttccctgatg aggggcttgg ccactgccac 5280
460 agcaccttga gtccgcggga ctggtcgcgc cactgttgga agggccgaca ggatgtcagg 5340
462 agtctgaga tgagggagtc gtgcaccac tggcagggga ggtcgtcgaa cccgtgggtc 5400
464 tggatgtaga cgttgcaact agtgttcggg tcgttggtgt tccacctgtt ctttcaactc 5460
466 gggtttagaa cactgttttg atcaccggtc cggccggtcg tggtagtggt agtggtaccg 5520
468 cgtatgggca tgcgtcaagg cctgatgcga agaactctcc caccaccgag actcccaccg 5580
470 ccaagactcc caccgcccag actccctccg ccaaggccac caccgagacc aaggccacta 5640
472 aaactaatac ttttctaccg tttgcgatta ttcccccgat actggctttt acggctactt 5700
474 ttgcgcgatg tcagactgcg atttcggtt gaactaagac agcgatgact aatgccacga 5760
476 cgatagctac caaagtaacc actgcaaagg ccggaacgat taccattacc acgatgacca 5820
478 ctaaaacgac cgagattaag ggtttaccga gttcagccac tgccactatt aagtggaaat 5880
480 tacttattaa aggcagttat aaatggaagg gagggagtta gccaaactac agcgggaaaa 5940
482 cagaaatcgc gaccatttgg tatacttaaa agataactaa cactgtttta tttgaataag 6000
484 gcaccacaga aacgcaaaga aaatatacaa cgggtggaaat acatacataa aagatgcaaa 6060
486 cgattgtatg acgcattatt cctcagaatt cgatcgatta attaaattcg ccggcgctca 6120
488 ga
491 <210> SEQ ID NO: 3
493 <211> LENGTH: 16
495 <212> TYPE: DNA
497 <213> ORGANISM: Artificial Sequence
501 <220> FEATURE:

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/006,591

DATE: 05/01/2002
TIME: 11:34:36

Input Set : A:\PTO.DC.txt
Output Set: N:\CRF3\05012002\J006591.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 16
Seq#:5; N Pos. 2
Seq#:6; N Pos. 71
Seq#:7; N Pos. 15
Seq#:9; N Pos. 11
Seq#:10; N Pos. 53

VERIFICATION SUMMARY

DATE: 05/01/2002

PATENT APPLICATION: US/10/006,591

TIME: 11:34:36

Input Set : A:\PTO.DC.txt

Output Set: N:\CRF3\05012002\J006591.raw

L:516 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:562 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:594 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:60
L:622 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:668 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:696 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0